

REMARKS

The Office Action dated July 26, 2005 has been received and carefully studied.

The Examiner objects to claim 2 under 37 C.F.R. §1.75(c) as being an improper dependent claim for failing to limit claim 1 on which it depends. By the accompanying amendment, claim 2 has been amended to overcome the objection.

The Examiner rejects claims 1-2 under 35 U.S.C. §103(a) as being unpatentable over Hollemann et al., U.S. Patent No. 6,711,184, claim 3 as being unpatentable over Hollemann et al. in view of Ryan et al., U.S. Publication No. 2003/0195495, and claim 4 as being unpatentable over Hollemann et al. in view of Ryan et al. and further in view of admitted prior art. The Examiner states that Hollemann et al. disclose a laser device comprising a laser beam emitter 1 having an optical resonator with a reflection mirror 3, and at least one of a length of the resonator is determined so as to satisfy the condition that a parameter M2 of the beam quality range of a projected laser beam is between 1-10. The Examiner notes that the range overlaps the claimed range. Ryan et al. is cited for its disclosure of a core diameter of the optical fiber of 50 μm and a numerical aperture NAf of the fiber of 0.12. The admitted prior art is noted as teaching NAe < NAf.

By the accompanying amendment, claim 1 is amended to recite the relationship between the numerical aperture of the laser beam entering the optical fiber, the numerical aperture of the laser beam emitted from the optical fiber, and the numerical aperture of the optical fiber. Claim 2 has been amended to recite details regarding a slit lamp optical system.

The present invention relates to a laser device which projects a laser beam to a required site via an optical fiber. The beam quality of the laser beam which is emitted from the optical fiber is defined to a desired condition.

Hollemann et al. discloses a diode-pumped laser having internal frequency doubling in order to prevent interfering power fluctuations in the laser radiation generated by the non-linear crystal. However, there is no concrete description about beam quality of a laser beam emitted via an optical fiber.


With regard to claim 3, claim 3 has been amended to recite the numerical aperture of the laser beam emitted from the optical fiber is within a specified range. This is nowhere disclosed or suggested by the combination of Hollemann et al. and Ryan et al.

With regard to claim 4, claim 4 has been amended to recite a core diameter of the optical fiber, and is believed to be allowable by virtue of its dependence.

The amendment to the specification corrects an obvious error.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,


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